

File

State of California  
The Resources Agency  
DEPARTMENT OF WATER RESOURCES  
DIVISION OF SAFETY OF DAMS

INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of dam Oroville Dam Dam No. 1-48 County Butte  
Type of dam Earthfill Type of Spillway Gated Concrete Weir and Chute  
Water is 70.8 feet below spillway crest and 179.5 feet below dam crest.  
\*Elevation 752.52 feet (above,below) (above,below)

Weather Conditions Cold, windy, with occasional rain

Contacts made Alex Samaan, Oroville Field Division

Reason for inspection Periodic Evaluation (inspection 1 of 2)

**Important Observations, Recommendations or Actions Taken**

Discussed my observations with O&M staff.

**Conclusions**

From the known information and the visual inspection, the dam, reservoir, and the appurtenances are judged satisfactory for continued use, pending modification of spillway gates.

Item No.*	Item Name and Observation and Comment
A1-A4	<p><u>Dam</u> - The dam embankment was uniformly wet from recent rains. The visible portions of the embankment slopes, crest, and abutments were in good condition with no sign of instability, excessive vegetation or rodent activity. The riprap on the upstream slope is in good condition.</p> <p>The upstream slope was observed from the crest and by walking the bench from left to right. Minor beaching is occurring in some areas. A small arc-like feature was noted on the bench. It extended from the downstream edge of the bench in a partial arc. Though unlikely, it could be an indication of a shallow slide. I recommended that O&amp;M staff watch the area as the water surface rises.</p> <p>The left gallery was entered and traversed to the sump area. The right gallery will be inspected during the second annual inspection. No unexpected structural conditions or seepage was encountered. Housekeeping in the galleries was much improved by removal of calcite buildup along the stairways and Terminal S area.</p> <p><u>Bidwell Bar Canyon Saddle Dam, Parish Camp Saddle Dam</u> - The reservoir water surface was well below the toe of the embankments. No indication of distress or instability was noted on the crest or slopes. The riprap is in excellent condition. No vegetation or rodent control problems were encountered.</p>

Typed by wmp  
Date 2/14/01  
cc for Book/Owner

Use Field Sheet Standard  
Numbers and Items  
(See Reverse Side)

*W Pennington* 2/14/01  
Inspected by W Pennington  
Date of Inspection 1/10/01  
Date of Report 2/14/01  
Photos taken? Yes X No  
Sheet 1 of 2 Sheets

# INSPECTION OF DAM AND RESERVOIR IN CERTIFIED STATUS

Name of Dam Oroville Dam No 1-48

Date of Inspection 1/10/01

## Observations and Comments (Continued)

Item No.*	Item Name and Observation and Comment
6, 8, 10	<p><u>Spillway</u> - The water surface was well below the spillway approach. The approach and downstream chute were clear and unobstructed. The emergency spillway weir is in satisfactory condition. The spillway piers, and walls were observed from the dam crest, left upstream training wall and lower roadway. The concrete is in good condition, with the exception of the ongoing deterioration on the interior side of the bridge supports. No recent movement of the walls or chute was evident.</p> <p>The radial gates and hoisting equipment were viewed from the hoist deck and the lower road. No unusual conditions were noted. Structural repair of the gates is scheduled for completion in December 2002, and will occur over two seasons.</p>
14, 16	<p><u>Outlet</u> - The turbines were running. The river outlets were closed. The partly exposed sloping intake was not visited, nor was the Palermo tunnel. The conditions in the valve room do not appear to have changed and are satisfactory. The outlet valves appear to be well maintained. The valves are reportedly cycled once per year. The existing damage to the ring baffle from previous high releases does not appear to have progressed.</p>
17	<p><u>Seepage</u> - Seepage in the gallery was minimal due to the low reservoir.</p>
18	<p><u>Instrumentation</u> - was inspected. The Terminal S piezometer tubes were recently cut at the crown of the tunnel and now drain directly to the floor, see photograph 1. A collection system will be installed to direct the flow to the floor drain system. Turbidity is measured regularly, although sediment transport does not appear to be a problem.</p>

Author/Typist WMP/wmp Sheet 2 of 2 Sheets



Oroville Dam, No. 1-48  
Photograph 1 1/10/01

Formerly, a number of piezometers were read at Terminal S within the foundation gallery. For the last several years these piezometers provided little useful information. Last year the tube bundle and mounting rack were removed as shown. The seepage from the tubing passes directly to the floor. Turbidity is measured regularly, although sediment transport doesn't appear to be a problem.